



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

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GOVERNOR

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SECRETARY

MEMORANDUM TO: Project Engineers
Project Design Engineers
FROM: T. V. Rountree, P. E.
State Bridge Design Engineer
DATE: April 14, 2000
SUBJECT: DIRECT TENSION INDICATORS

At the request of the Construction Unit, and to ensure proper bolt tension, all steel girder bolted connections shall include direct tension indicators. The turn-of-the-nut method will no longer be allowed. Place the following note on the plans:

Tension on the AASHTO M164 bolts shall be calibrated using direct tension indicator washers. For Direct Tension Indicators, see Special Provisions.

This policy is effective with the July 2000 letting. The Design Manual and Project Special Provisions will be revised at a later date.

TVR/RH/



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Last Updated: 04/12/2000 by: Randy Bissette

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